

ABSTRACT OF THE DISCLOSURE

The Smart Card URL Programming interface (UPI) builds a local web or card server around a card terminal and the inserted smart card. This server can also support secure object storage, which stores serialized, secure signed, compressed objects (or applications or data) for delivery to the card or for off-loading from the card. The secure object storage is also web addressable, so that a user needs only one storage area that can be on the Internet and accessed from all locations. The object storage program stores objects with the option of signing and/or encrypting and retrieves objects which may require cryptographic credentials.

If a user desires to run applications on a card that exceed the memory capacity of the card, information about the applications, including pointers and their digital signatures, is acquired and stored on the card by the card server.

The card is thus provided with basic information about the nature of the applications that are authorized for use on the card at the time that the card is first loaded. The card server manages the applications on a card and their movement on and off the card. Applications on a card can be moved off to secure storage and applications in secure storage can be moved to the smart card. Data on a card can be moved to secure storage and data in secure storage can be moved to the card securely.